

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/021985

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K33/00 A61P9/08 A61P9/10 A61P9/12		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 A61K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, CHEM ABS Data, EMBASE, MEDLINE		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/53193 A (TUCKER ARTHUR TUDOR ; BENJAMIN NIGEL (GB); QUEEN MARY & WESTFIELD COLL) 14 September 2000 (2000-09-14)	1,7-13, 19-22
Y	claims 1-9	2-6,27
Y	M. P. DOYLE ET AL: "Kinetics and Mechanism of the Oxidation of Human Deoxyhemoglobin by Nitrites" THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 256, no. 23, 20 December 1981 (1981-12-20), pages 12393-12398, XP002302035 cited in the application the whole document	2-6,27
-/--		
<div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex. </div>		
* Special categories of cited documents :		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>*Z* document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search <div style="text-align: center; font-weight: bold;">26 October 2004</div>		Date of mailing of the international search report <div style="text-align: center; font-weight: bold;">08/11/2004</div>
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016		Authorized officer <div style="text-align: center; font-weight: bold;">Siatou, E</div>

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95/12394 A (US HEALTH ; UNIV LOUISIANA STATE (US)) 11 May 1995 (1995-05-11) claims 1,10,14-17 -----	1,7-12, 19-22
X	WO 94/22499 A (BRIGHAM & WOMENS HOSPITAL) 13 October 1994 (1994-10-13) claims 1-12 page 7, line 9 - line 25 -----	1,9-12, 15-22
X	WO 01/89572 A (BALABAN ALEXANDRU T ; GARFIELD ROBERT E (US); STEWART RANDALL J (US);) 29 November 2001 (2001-11-29) page 14, line 15 - line 23 page 12, line 20 - page 13, line 11 page 3, line 5 - line 26 claims 1-35 -----	1,7-13, 15-26
A	WO 02/17898 A (SACKS MEIR S) 7 March 2002 (2002-03-07) page 8, line 16 - line 31 claims 1-20 -----	1-4,9, 11-14, 19-25
A	GLADWIN M T ET AL: "Pathogenesis and treatment of acute chest syndrome of sickle-cell anaemia" LANCET, vol. 355, no. 9214, 29 April 2000 (2000-04-29), pages 1476-1478, XP004263442 ISSN: 0140-6736 page 1477, right-hand column, line 7 - line 15 -----	1-27
A	T. RASSAF ET AL: "Evidence for in vivo transport of bioactive nitric oxide in human plasma" THE JOURNAL OF CLINICAL INVESTIGATION, vol. 109, no. 9, May 2002 (2002-05), pages 1241-1248, XP002302031 cited in the application abstract page 1244, right-hand column, line 18 - line 25 page 1245, left-hand column, line 27 - line 42 page 1245, left-hand column, last paragraph ----- -/--	1-27

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>R. O. CANNON ET AL: "Effects of inhaled nitric oxide on regional blood flow are consistent with intravascular nitric oxide delivery"</p> <p>THE JOURNAL OF CLINICAL INVESTIGATION, vol. 108, no. 2, July 2001 (2001-07), pages 279-287, XP002302032</p> <p>cited in the application abstract</p>	1-27
A	<p>A. FOX-ROBICHAUD ET AL: "Inhaled NO as a Viable Antiadhesive Therapy for Ischemia/reperfusion Injury of Distal Microvascular Beds"</p> <p>THE JOURNAL OF CLINICAL INVESTIGATION, vol. 101, no. 11, June 1998 (1998-06), pages 2497-2505, XP002302033</p> <p>cited in the application abstract</p>	1-27
A	<p>T. LAUER ET AL: "Plasma nitrite rather than nitrate reflects regional endothelial nitric oxide synthase activity but lacks intrinsic vasodilator action"</p> <p>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 98, no. 22, 23 October 2001 (2001-10-23), pages 12814-12819, XP002302034</p> <p>cited in the application abstract</p>	1-27

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 1-27 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0053193	A	14-09-2000	AU 2931500 A EP 1161248 A1 WO 0053193 A1 JP 2002538210 A US 2002090401 A1	28-09-2000 12-12-2001 14-09-2000 12-11-2002 11-07-2002
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WO 0189572	A	29-11-2001	US 6103275 A WO 0189572 A1	15-08-2000 29-11-2001
WO 0217898	A	07-03-2002	AU 8852301 A WO 0217898 A2	13-03-2002 07-03-2002